

**INITIAL STATEMENT OF REASONS
FOR
PROPOSED BUILDING STANDARDS
OF THE
CALIFORNIA BUILDING STANDARDS COMMISSION (CBSC)**

**REGARDING THE CALIFORNIA GREEN BUILDING STANDARDS CODE,
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11**

[Note to agencies: Directions below which, like this note, are not intended to be shown in your submittal, have been updated to reflect requirements of AB 1711 (Chapter 779, Statutes of 2014) effective January 1, 2015. New directions are shown in underline.]

The Administrative Procedure Act (APA) requires that an Initial Statement of Reasons be available to the public upon request when rulemaking action is being undertaken. The following information required by the APA pertains to this particular rulemaking action:

STATEMENT OF SPECIFIC PURPOSE, PROBLEM, RATIONALE and BENEFITS:

(Government Code Section 11346.2(b)(1) requires a statement of specific purpose of each adoption, amendment, or repeal and the problem the agency intends to address and the rationale for the determination by the agency that each adoption, amendment, or repeal is reasonably necessary to carry out the purpose and address the problem the agency intends to address for which it is proposed. The statement shall enumerate the benefits anticipated from the regulatory action, including the benefits or goals provided in the authorizing statute.)

This proposed action by CBSC adopts mandatory and voluntary green building standards for occupancies within its authority, building upon a framework of voluntary measures adopted by CBSC in 2008 and make modifications and clarifications to the 2013 code and its recently published supplement, which became effective on July 1, 2015. The intent of the code continues to (1) reduce greenhouse gas (GHG) emissions from buildings, (2) promote environmentally responsible, cost-effective, healthier places to live and work; and (3) respond to the directives by the Governor in the 2008 to develop a green building code.

CBSC's proposed action will support the implementation of the Governor's Executive Order B-16-2012 to achieve a benchmark for having over 1.5 million zero-emission vehicles (ZEVs) on California roadways by 2025 and the interim target to provide infrastructure to support 1 million ZEVs by 2020. In October 2013, Governor Brown announced an initiative to put 3.3 million zero-emission vehicles on the road within a dozen years. This initiative is a memorandum of understanding signed by the governors of California, Connecticut, Maryland, Massachusetts, New York, Oregon, Rhode Island, and Vermont. These states comprise 27 percent of the U.S. vehicle market and the initiative demonstrates their commitment to support a successful and growing market for electric vehicles, an important strategy to help reduce emissions of criteria air pollutants and GHG, and to reduce dependence on petroleum-based fuels. CBSC's proposed amendments to the July 1, 2015 Supplement to the California Green Building Standards (CALGreen) Code will support the Executive Order and memorandum of understanding.

The proposed changes to the building standards with statewide application will lead to substantial environmental benefits through reduction in the use of energy, water, and raw materials; improved public and building occupant health due to improved indoor air quality; and overall reduced detrimental environmental impacts.

Proposed Regulatory Actions: CBSC proposes to amend 2013 CALGreen Code along with the July 1, 2015 Supplement during the 2015 Triennial Code Adoption Cycle. It is CBSC's intent to provide clarity to the code user in consistent reference nomenclature to other Parts of Title, 24. The rationale for each adoption by chapter, division, and section is listed below.

ITEM 1. CBSC Proposes to amend the Preface, Acknowledgements & Legend Agency Adoptions

Specific Purpose:

CBSC proposes to update the number of parts of the building standards code as identified in law as Title 24. Additionally update the list of Commissioners to reflect the current membership of the Commission and clarify the legend of abbreviations to include **BSC-CG** in response to AB 341.

With the addition of Part 2.5 California Residential Code during the 2009 triennial code adoption cycle, the total number of codes included in the Title 24 standards increased from 12 parts to 13 parts, therefore CBSC is proposing to change the preface to reflect the actual number of codes included in Title 24 as well as update the names of the Commissioners currently serving on the California Building Standards Commission.

Additionally, CBSC is proposing a new acronym, **BSC-CG** (California Building Standards Commission – CALGreen) to aid the code user to identify the scoping and application of green building standards that are contained in CALGreen and other parts of title 24 in response to AB 341.

Rationale:

The California Building Standards Commission is the state agency with the responsibility for maintaining the format of the published codes. These changes will provide a more accurate accounting of the parts of code available through Title 24, California Code of Regulations (CCR).

Additionally, the BSC banner currently in Parts 2, 3, 4, 5, 10 of Title 24, indicates code amendments which are applicable to the CBSC occupancies defined in Chapter 1, Division 1, Section 1.2 of Part 2, 4, 5, 10 and Article 89 of Part 3. In summary, the BSC scope and application applies to State Buildings, trustees of the California State University and Regents at the University of California where no state agency has the authority to adopt building standards applicable to such buildings; standards for parking lots lighting and primary campus walkways at the University of California, California State Universities and California Community Colleges; building seismic retrofit standards including abating falling hazards of structural and nonstructural components and strengthening of building structures; minimum seismic strengthening standards for buildings specified in Appendix Chapter A1 of the California Existing Building Code.

Currently in the California Green Building Standards Code (CALGreen), Part 11, Title 24, the BSC banner applies to all occupancies for which no state agency has the authority or expertise to propose green building standards; essentially non-residential occupancies.

Assembly Bill 341 (Chaptered 585, Statutes of 2013) authored by Assembly member Dickinson, amended H & SC §18940.5 to direct state agencies that propose green building standards to reference the California Green Building Standards Code (CALGreen) in other relevant portions of the Codes. In order for CBSC to provide references to the CALGreen code in the various other codes, CBSC must distinguish between the appropriate occupancies.

Benefit:

Changing these references will clarify the codes that are available for construction and maintain the most current building standards for the protection of public health and welfare in the built environment. Additionally, updating the current sitting members of the Commission allows the public to be aware of the person responsible for the adoption and publication of the building standards codes. Lastly, creating a specific banner for CBSC's CALGreen provisions will aid the code user to disseminate whether a code provision applies to the general BSC occupancies or to the CALGreen occupancies.

ITEM 2. CBSC Proposes to amend Chapter 1, Section 101 General

Section 101.1 Title

Specific Purpose:

Similar to Item 1, this proposed action is an editorial revision to specify there are thirteen parts of the California Building Standards Codes rather than twelve. The 2010 California Residential Code, Part 2.5 was added in the 2009 triennial code adoption cycle, the "Parts" increased from twelve to thirteen. Twelve parts are actually published, with Part 7 being vacant.

Rationale:

The California Building Standards Commission is the state agency with the responsibility for maintaining the format of the published codes. These changes will provide a more accurate accounting of the parts of code available through Title 24, California Code of Regulations (CCR).

Benefit:

Changing this reference will clarify the codes available for use for construction.

Section 101.7.1 Findings and filings. (3)

Specific Purpose:

This proposed action is editorial in nature to correct the department of Housing and Community Development's mailing address.

Rationale:

Maintain accuracy for the code user.

Benefit:

Assist the public to be able to correspond with HCD by maintaining an accurate street address.

ITEM 3. CBSC Proposes to amend Chapter 1, Section 103 Building Standards Commission

Section 103.1 BSC-CG, 103.1.1 adoption agency identification and Application sections 1,3,4 & 5

Specific Purpose:

CBSC is proposing to repeal the **BSC** banner from CALGreen and replace it with **BSC-CG** (California Building Standards Commission – CALGreen); to add a **BSC-CG** banner to section 103.1 and to add a new Section 103.1.1. Additionally, Application Sections 1, 3, 4 & 5 are proposed to be repealed.

Rationale:

This action proposes to repeal the scope and application of the **BSC** banner section to add scoping and application for a **BSC-CG** [Building Standards Commission–California Green Building Standards Code (CALGreen)] banner. Additionally, Application Sections 1, 3,4 & 5 are proposed to be repealed because the new added Section 103.1.1. addresses the applicability and authority of the Building Standards Commission as it pertains to the CALGreen provisions.

Currently in Parts 2, 3, 4, 5, & 10 of Title 24, the BSC banner indicates code amendments which are applicable to the BSC occupancies defined in Chapter 1, Division 1, Section 1.2 of Parts 2, 4, 5, 10 and Article 89 of Part 3. In summary, the BSC scope and application applies to State Buildings, Trustees of the California State University and Regents at the University of California where no state agency has the authority to adopt building standards applicable to such buildings; standards for parking lots lighting and primary campus walkways at the University of California, California State Universities and California Community Colleges; building seismic retrofit standards including abating falling hazards of structural and nonstructural components and strengthening of building structures; minimum seismic strengthening standards for buildings specified in Appendix Chapter A1 of the California Existing Building Code.

Currently in the California Green Building Standards Code (CALGreen), Part 11, Title 24, the BSC banner applies to all occupancies for which no state agency has the authority or expertise to propose green building standards; essentially non-residential occupancies.

Assembly Bill 341 (Chaptered 585, Statutes of 2013) authored by Assembly member Dickinson, amended H & SC §18940.5 to direct state agencies that propose green building standards to reference the California Green Building Standards Code (CALGreen) in other relevant portions of the Codes. In order for CBSC to provide references to the CALGreen code in the various other codes, CBSC must distinguish between the appropriate occupancies.

Benefit:

Repealing the **BSC** banner and replacing it with **BSC-CG** will provide better clarity for the code user as to the application of the CALGreen provisions. Additionally, repealing Application Sections 1, 3,4 & 5 simplifies the code and adds further clarity as to the applicability and authority of the Building Standards Commission as it pertains to the CALGreen provisions by using the new **BSC-CG** banner.

ITEM 4. CBSC Proposes to amend Chapter 2, Section 202 Definitions

Section 202 Definitions.

Specific Purpose:

With the proposed addition of the **BSC-CG** banner, CBSC is proposing to amend all **BSC** references throughout CALGreen by replacing the **BSC** banner with the new **BSC-CG** banner to clarify the scope and application of green building standards. CBSC proposes to add “-CG” to the BSC banner in the following definitions as mentioned in Item 1 above:

OVE
POSTCONSUMER CONTENT
PRECONSUMER (OR POSTINDUSTRIAL)
RECYCLED CONTENT
RECYCLED CONTENT VALUE (RCV)

Additionally, CBSC proposes to adopt the following definitions:

HYBRID URINAL

Rationale:

CBSC proposes to adopt the above referenced definition. The term “Hybrid Urinal” is used in CBSC’s new proposed voluntary code section A5.303.4.1. The proposed definition is consistent with the definition in the IAPMO IGC 311-2014 (IAPMO Guide Criteria), which is the current standard for hybrid urinals with high-efficacy drain cleaning feature.

Benefit:

Adding a definition for Hybrid Urinals and adding it as a voluntary provision into CALGreen will allow the local jurisdictions the ability to adopt the use of hybrid urinals as a voluntary measure. Additionally, the allowance of waterless urinals as an option will aid in reducing the use of potable water for flushing urinals.

METERING FAUCET

Rationale:

CBSC is proposing to add the definition for metering faucet. The above referenced term is referenced in existing Sections 5.303.3.4.4 and 5.303.3.4.5. The proposed definition is consistent with the definition as defined in Appendix L of the 2013 California Plumbing Code.

Benefit:

This proposal would provide consistency between the 2016 CALGreen Code and the 2016 California Plumbing Code and provides clarity to the code user of fixtures that qualify as a metering faucet.

ORGANIC WASTE

Rationale:

CBSC proposes to adopt a definition for “Organic Waste”, which is referenced in the proposed amended Section 5.410.1. The proposed definition is consistent with the definition in Public Resources Code Section 42649.8(c), which is the regulation for recycling of organic waste.

Benefit:

This proposal would provide consistency between the 2016 CALGreen Code and the California Public Resources Code and informs the code user of the waste materials subject to the proposed mandatory measure.

UNIVERSAL WASTE

Rationale:

CBSC proposes to adopt a definition for Universal waste, which is referenced in the proposed new Section 5.408.2 and coordinates with the definition proposed by HCD for 4.408.6. The proposed definition is consistent with the definition in Title 23, California Code of Regulations, Chapter 23 “Standards for Universal Waste Management.”

Benefit:

This proposal would provide consistency between the 2016 CALGreen Code and Title 23 of the California Code of Regulations and informs the code user of the waste materials subject to regulation.

ITEM 5. CBSC Proposes to amend Chapter 3, Section 301 General

Section 301.3.2 Waste Diversion.

Specific Purpose:

CBSC proposes this new section for adoption which requires the mandatory waste diversion provisions of Section 5.408 apply to any project requiring a permit. Currently, Section 5.408 does not apply to non-residential additions of 1,000 square feet or less or to alterations with permit valuations less than \$200,000. CBSC is proposing to remove these minimum threshold requirements as they pertain to Section 5.408 so waste diversion requirements will subsequently apply to all non-residential additions and alterations.

Rationale:

The California Department of Resources Recycling and Recovery (CalRecycle) initially proposed this section in the CALGreen workshop on February 5, 2015. The new section proposes a strategy to increase waste diversion by further developing regulations for the implementation of Assembly Bill 341 (Chapter 476, Statutes of 2011) authored by Assembly Member Chesbro, which directs CalRecycle to propose statewide strategies to assist in meeting the statewide recycling goal of 75-percent by 2020. AB 341 also requires mandatory commercial recycling programs.

Construction and demolition waste represents over 20-percent of landfill waste. Additionally, waste is generated as a result of construction or demolition, whether the project is new construction or an addition or alteration. Whenever waste is generated, it still needs to be managed and should require diversion. Reducing the threshold for when construction and demolition waste diversion is required would increase overall recycling.

Benefit:

In addition to supporting the Administration's directives, CBSC's goal is to increase overall recycling and support local jurisdiction's efforts in implementing mandatory commercial recycling programs pursuant to AB 341.

ITEM 6. CBSC Proposes to amend Chapter 3, Section 303 Phased Projects

Section 303.1.1 Tenant improvements.

Specific Purpose:

CBSC proposes to amend the above reference section by clarifying the scoping and application of green building standards to initial and subsequent tenant improvements in phased projects. The term “initial” is being added to the section title to clarify the application of the section to the preliminary construction improvements of a space. Additionally, the word occupant is being repealed to clarify that the regulation applies to the tenant space and not to the occupants. Lastly, a reference to the scoping provisions in section 301.3 has been added to address the applicability of CALGreen for additions and alterations in subsequent improvements to the initial tenant space.

Rationale:

Currently there is some confusion as to when CALGreen provisions apply to tenant improvements in phased projects. CBSC is proposing language to clarify that in phased projects, such as vanilla shell buildings, the initial tenant improvements to a space will need to comply with the applicable portions of CALGreen based on the scope of the project. Additionally, if there are subsequent tenant improvements to that same space, they would be subject to any CALGreen provisions applicable to additions and/or alterations based on the scope of the project.

Benefit:

The amended language will aid the code user in differentiating between code provisions for newly constructed buildings that apply to initial tenant improvements and code provisions for additions and/or alterations that apply to subsequent tenant improvements. This proposed amendment will add clarity as to the applicability of CALGreen and will assist the code user in properly applying the CALGreen code.

ITEM 7. CBSC Proposes to amend mandatory regulations in Chapter 5, Division 5.1, Section 5.106 Site Development

Sections 5.106.4.1 and 5.106.4.1.1

Specific Purpose:

With the proposed addition of the **BSC-CG** banner, CBSC is proposing to amend all **BSC** references throughout CALGreen by replacing the **BSC** banner with the new **BSC-CG** to clarify the scope and application of green building standards. CBSC proposes to add “-CG” to the BSC banner in the following sections listed above:

Rationale:

With the proposed addition of the **BSC-CG** banner to replace the current **BSC** banner as per Item 3, Sections 5.106.4.1 and 5.106.4.1.1 need to be amended to accordingly.

Benefit:

This proposed amendment will add clarity as to the applicability of CALGreen and will assist the code user in properly applying the CALGreen code.

Section 5.106.4.1.2 Long-term bicycle parking.

Specific Purpose:

CBSC proposes to amend the above referenced section by clarifying the application of long-term bicycle parking. The proposed language changes the activation for providing the required long-term bicycle parking from “over 10 tenant-occupants” to “10 or more tenant-occupants.”

Rationale:

Currently the requirement for long-term bicycle parking is triggered when there are over 10 tenant-occupants in a building which makes the provision applicable at 11 tenant-occupants. CBSC’s intent was for the provision to apply at 10 or more and so CBSC is proposing to repeal the word “over” and add the words “or more” to clarify the trigger. The amended language would align with the 10 or more tenant

vehicular parking spaces within the same code section and also aligns with the provisions for designated parking spaces.

Benefit:

This proposed amendment will add clarity as to the intent of CALGreen for long term bicycle parking requirements. Additionally, this amendment will add uniformity and consistency within similar code provisions which will ultimately benefit the code user.

ITEM 8. CBSC Proposes to amend mandatory regulations in Chapter 5, Division 5.1, Section 5.106 Site Development

Section 5.106.5.2 Designated parking for fuel-efficient vehicles.

Specific Purpose:

This proposed action is editorial in nature to clarify in the title that the designated parking requirements of this section are in relation to fuel-efficient vehicles.

Rationale:

The amended language would align with the title of the corresponding voluntary section A5.106.5.1.

Benefit:

Maintain clarity and consistency for the code user.

ITEM 9. CBSC Proposes to amend mandatory regulations in Chapter 5, Division 5.1, Section 5.106 Site Development

Section 5.106.5.3.1 Single charging space requirements. [N]

Specific Purpose:

This proposed language deletes references to raceway and replaces them with a requirement to install wiring. It also includes a cross reference to the accessibility provisions in the California Building Code, Chapter 11B. These code changes incorporate comments received from state agency stakeholders and the building industry.

This proposed section would require that wiring be installed at the time of construction, and would include suitable listed equipment.

Rationale:

CBSC proposes to adopt revisions to this section which requires specified criteria to be included in construction plans and specifications to ensure infrastructure will be capable of supporting EV chargers at the 40-ampere or greater level. Additionally, by providing wiring during the initial raceway installation, the only barrier to the building owner or third party is the need to purchase EV charging stations.

Benefit:

Adding a cross reference to the accessibility provisions in the California Building Code, Chapter 11B, alerts the code user of other applicable codes when EV charging stations are installed. Additionally, Retrofit costs are much lower if the wiring is already in place compared to no infrastructure or just raceway.

Section 5.106.5.3.2 Multiple charging spaces requirements. [N]

Specific Purpose:

CBSC proposes to adopt revisions to this section, which requires specified criteria to be included in construction plans and specifications to ensure infrastructure will be capable of supporting EV chargers at 40 amperes or greater and simultaneous charge all EV's at future charging spaces. This proposed revision to this section would require that wiring be installed at the time of construction. This section also requires construction plans to indicate the future location of EVSE's, and location of the wiring termination point. The proposed language specifies the electrical calculation requirements for plan design.

Rationale:

Providing wiring during the initial raceway installation, the only barrier to the building owner or third party is the need to purchase EV charging stations. Preplanning for EV charging would significantly minimize future retrofit costs.

Benefit:

Adding a cross reference to the accessibility provisions in the California Building Code, Chapter 11B, alerts the code user of other applicable codes when EV charging stations are installed.

Additionally, Retrofit costs are much lower if the wiring is already in place compared to no infrastructure or just raceway.

Section 5.106.5.3.3 EV charging calculation. [N] and Table 5.106.5.3.3 [N]

Specific Purpose:

CBSC proposes to amend the above referenced table by increasing the percent of required electric vehicle (EV) charging spaces and lowering the parking lot size threshold of mandatory EV charging requirements for new construction of nonresidential buildings. CBSC proposes to increase the EV charging space calculation from 3 percent to 6 percent in new nonresidential buildings. CBSC also proposes to lower the threshold for total number of parking spaces that would be required to install EV charging infrastructure from 51 spaces to 10 spaces.

Rationale:

Under a mandate from Assembly Bill 1092 (Chapter 410, Statutes of 2013) authored by Assembly Member Levine, CBSC was directed to develop mandatory EV standards for nonresidential development during the 2016 Triennial Code Adoption Cycle. In support of the Governor's Executive Order B-16-2012, CBSC adopted the mandatory EV standards in Section 5.106.5.3 at an earlier date during the 2013/2014 Intervening Code Cycle.

Healthy and Safety Code Section 18930.5(b) as amended by Assembly Bill 341 allows the CBSC and other state agencies that propose building standards to allow for input by state agencies that have expertise in green building subject areas. The California Air Resources Board (CARB) has expertise in air quality, climate change, and EV charging infrastructure. On July 10, 2015, CARB provided in-depth technical and fiscal analysis along with suggested code changes to the EV charging infrastructure building standards included in the CALGreen Code.

In addition to supporting the Administration's directives, CBSC's goal is to enable future charging capability at nonresidential facilities in an effort to reduce the lack of access to EV charging which currently exists. We believe this effort will further encourage the purchase and use of EVs for routine transportation. In addition, this proposal would result in significant cost savings for future installation of EV charging stations at nonresidential occupancies.

This section and table specify the minimum number of required parking spaces to be used to design the electrical infrastructure for future EVSE capability. The proposed revised minimum numbers are based on the CARB technical and fiscal analysis. CARB gathered data from multiple sources to identify how many EV charging spaces will be needed in workplace locations by 2020. CARB gathered information on existing, funded, and proposed EV charging infrastructure to determine the gap in needed Level 2 EV charging stations remaining for 2020. An estimated gap of at least 64,000 and as many as 134,000 EV charging spaces needs to be filled in workplace locations by 2020.

Benefit:

These proposed changes will help to fill the gap of EVSE charge points needed in 2020. It will also help to improve air quality and reduce green-house gas emissions in California.

Section 5.106.5.3.5 [N]

Specific Purpose:

This proposed action is editorial in nature to clarify that future charging spaces qualify as designated parking for fuel efficient vehicles.

Rationale:

Currently the code section is not clear as to applicability of designated parking spaces for future fuel efficient vehicles.

Benefit:

Maintain clarity and consistency for the code user.

ITEM 10. CBSC Proposes to amend mandatory regulations in Chapter 5, Division 5.1, Section 5.106 Site Development

Section 5.106.8 Light pollution reduction.

Specific Purpose:

CBSC proposes to amend the above referenced section by adopting additional exceptions that clarify the application of the light pollution reduction provisions for outdoor lighting.

Rationale:

Due to the number of inquiries received regarding the difficulty of compliance with this code section for specific lighting conditions, CBSC is proposing to add new exceptions to allow more flexibility for compliance with light pollution reduction. CBSC is proposing to add an exception for security lighting for truck yards at distribution warehouses where compliance is impractical and to exempt building façade lighting that is already an allowance in the California Energy Code. Additionally, an exception for custom lighting features as permitted by the local enforcing agency.

Benefit:

The added exceptions will allow for flexibility for specific lighting features and conditions as well as assist the local enforcing agency to accept design alternatives to meet this provision. Alternate means and methods is an option already allowed per statute, however, adding this exception would benefit both the local enforcing agency and the code user.

ITEM 11. CBSC Proposes to amend mandatory regulations in Chapter 5, Division 5.3, Section 5.302 Definitions

Section 5.302.1 Definitions.

Specific Purpose:

This proposed action is editorial in nature to add a defined term reference to "Metering Faucet," which is proposed for adoption in section 202 Definitions.

Rationale:

The amended language would align with other referenced terms in the same section.

Benefit:

Maintain clarity and consistency with other defined terms in this chapter.

ITEM 12. CBSC Proposes to amend mandatory regulations in Chapter 5, Division 5.3, Section 5.303 Indoor Water Use

Section 5.303.1 Meters

Specific Purpose:

This proposed action is editorial in nature to correct referenced section numbers.

Rationale:

CBSC is proposing to amend Section 5.303.1 Meters to correct the referenced section numbers, which are pointers for sections relating to the installation of meters.

Benefit:

Maintain clarity and consistency for the code user.

Section 5.303.3.1 Water closets;

Note

This proposed action is to repeal the “Note” from Section 5.303.3.1 because the 2015 Uniform Plumbing Code has added the same code language in a new Section 411.2.1 title Dual Flush Water Closets.

Specific Purpose:

This proposed action is to repeal a “Note” that is no longer applicable.

Rationale:

To remove the state amended text no longer needed. Model code printed the same code language. CBSC is proposing to amend Section 5.303.3.1 to the repeal the “Note” because the 2015 Uniform Plumbing Code has added the same code language.

Benefit:

Maintain clarity and consistency for the code user and removes code language duplication.

Section 5.303.4.1 Food waste disposers

Specific Purpose:

This proposed action is to add a new code section for food waste disposers .

Rationale:

Some disposers can consume between 2 and 15 gallons per minute (gpm), with newer systems using up to 13 gpm. CBSC is proposing limiting water use in the following ways: Installing a flow control valve to restrict the flow rate of water into the disposer when the disposer is operating. Limiting water flow when the disposer is not in use (i.e. no activity or no load condition) by: Modulating the flow rate of water into the disposer based on the load of the system (i.e. whether it has food waste in it or not); or using time clock controllers that turn the disposer off after a designated period of time to minimize how long the unit is on.

Benefit:

Maintain clarity and Compliant products are available and typical savings appear large enough to rapidly pay back costs for water-saving features.

**Section 5.303.5 Areas of additions or alterations and
Section 5.303.6 Standards for plumbing fixtures and fittings.**

Specific Purpose:

This proposed action is editorial in nature to correct the code section number for “additions and alterations” from 4 to 5 and to add a new applicable code section reference 5.303.4. Additionally, make editorial edits to update the applicable standards in the *California Plumbing Code*.

Rationale:

Editorial corrections to the revised code section number and new reference to section 5.303.4. The referenced standards were relocated from Chapter 14 to Chapter 17 in the *California Plumbing Code*.

Benefit:

Maintain clarity and consistency for the code user.

ITEM 13. CBSC Proposes to amend mandatory regulations in Chapter 5, Division 5.4, Section 5.402 Definitions

Section 5.402.1 Definitions.

Specific Purpose:

This proposed action is editorial in nature to add a reference to the term “Organic Waste,” which is proposed for adoption in section 202 Definitions.

Rationale:

The amended language would align with other referenced terms in the same section.

Benefit:

Maintain clarity and consistency for the code user.

ITEM 14. CBSC Proposes to amend mandatory regulations in Chapter 5, Division 5.4, Section 5.408 Construction Waste Reduction, Disposal and Recycling

Section 5.408.1 Construction waste management.

Section 5.408.1.3 Waste stream reduction alternative.

Specific Purpose:

CBSC proposes to amend the above referenced section by increasing the percentage of diverted nonhazardous construction and demolition (C&D) waste from 50% to 65%, subsequently adopting the current Tier 1 voluntary measure of 65% as mandatory.

Rationale:

CBSC withdrew this proposed amendment during the 2013 Intervening Code Cycle, Green Code Advisory Committee (CAC), as a result of comments received. It was recommended by the CAC that CBSC reintroduce the proposed code amendment for the 2015 Triennial Code Adoption Cycle. Some of the comments received related to existing franchise agreements between the local jurisdictions and the haulers that were still active. Additionally, there was concern with CBSC proposing a more restrictive standard than the Department of Housing and Community Development. The market has now had an opportunity to implement the requirement and it appears that 65% is an achievable percent for construction waste reduction/disposal/recycling. HCD is also proposing similar amendments this cycle that will align with CBSC. Lastly, the exception for alternate methods remains for local agencies that do not have recycling facilities to meet this provision.

In the early development of mandatory standards for the 2010 CALGreen Code, CBSC staff conducted a cost/benefit analysis and found a relatively modest cost on a small nonresidential project for a detailed construction and demolition (C&D) plan to be projected at less than 1% of construction cost, and the same for larger projects. The cost is negligible for the 15% increase in C&D waste diversion.

Benefit:

The proposed amendment would significantly assist the state in meeting the statewide recycling goal of 75% by 2020 as established by AB 341 (Chapter 476, Statutes of 2011).

ITEM 15. CBSC Proposes to add a regulation in Division 5.4 Material Conservation and Resource Efficiency, Section 5.408.2 Universal Waste

Section 5.408.2 Universal Waste.

Specific Purpose:

CBSC is proposing a new code section 5.408.2 in CALGreen to address Universal Waste.

Rationale:

The hazardous waste regulations (California Code Regulations, Title 22, Division 4.5, Chapter 11 Section 66261.9) identify seven categories of hazardous wastes that can be managed as universal wastes. Any unwanted item that falls within one of these waste streams can be handled, transported and recycled following the requirements set forth in the universal waste regulations (UWR) (California Code Regulations, Title 22, Division 4.5, chapter 23)

On February 9, 2004, regulations took effect in California that classified all discarded fluorescent lamps as hazardous waste. This includes even low mercury lamps marketed as "TCLP passing" or "TTLIC passing." **No one in California is allowed to discard their fluorescent lamps and batteries as nonhazardous solid waste (as ordinary trash).**

Under California's Universal Waste Rule households and "conditionally exempt small quantity generators" were allowed to dispose fluorescent lamps, batteries (not lead/acid batteries of the type used in autos), mercury thermostats, and electronic devices to the trash through February 8, 2006, unless the local trash companies or other agencies prohibited it. Large and small quantity handlers are required to ship their waste to another handler, a universal waste transfer station, a recycling facility, or a disposal facility.

Benefit:

By adding Universal Waste to the 2016 CALGreen code, the authorities having jurisdiction can provide more enforcement of existing landfill bans and increase the chance of tracking Universal Waste being removed from construction and demolition projects.

ITEM 16. CBSC Proposes to amend mandatory regulations in Chapter 5, Division 5.4, Section 5.410 Building Maintenance and Operation

Section 5.410.1 Recycling by occupants and Exception.

Specific Purpose:

Currently, the above referenced section requires areas to be provided for occupants for the depositing, storage, and collection of recyclable materials including: paper, corrugated cardboard, glass, plastics, and metals. CBSC proposes to amend Section 5.410.1 by adding "organic waste" to the list of materials which need to be included for depositing, storing, and collecting of non-hazardous materials for recycling. Additionally, the new exception has been added to clarify that jurisdictions qualifying as rural are exempt from this code provision.

Rationale:

The California Department of Resources Recycling and Recovery (CalRecycle) initially proposed this section in CBSC's CALGreen workshop on February 5, 2015. AB 1826 (Chapter 727, Statutes of 2014), requires, as of April 1, 2016, any business generating 8 cubic yards or more of organic waste shall arrange for recycling services specific to that waste. The threshold for required service is reduced to 4 cubic yards of organic waste on January 1, 2017, and to 4 cubic yards of commercial solid waste effective January 1, 2019. Organic materials constitute about 40% of what is landfilled and are the primary source of methane emissions from

landfills, a potent greenhouse gas. Additionally, the new exception in 5.410.1 is for jurisdictions qualifying as rural, and is consistent with those provided for in AB 1826.

Benefit:

AB 341 (Chapter 476, Statutes of 2011) set California's statewide recycling goal at 75%, and directed CalRecycle to propose statewide strategies to assist in meeting that goal. This strategy will improve organic waste diversion and ultimately assist businesses that will be required to meet Assembly Bill 1826, starting in 2016. Additionally, providing adequate space for the storage and collection of organic waste would increase overall recycling and reduce landfill emissions of methane, resulting in significant greenhouse gas emission reductions consistent with the Air Resource Board's 2014 Scoping Plan Update.

ITEM 17. CBSC Proposes to amend mandatory regulations in Division 5.4 Material Conservation and Resource Efficiency, Section 5.410 Building Maintenance and Operation

Section 5.410.2 Commissioning and Exception 4 and "Note".

Specific Purpose:

CBSC is proposing to amend the Section listed above along with the exceptions to clarify that mandatory commissioning measures in Section 5.410.2 through 5.410.2.6 apply to I and L occupancies which are not regulated by OSHPD regulations or the California Energy Code.

Rationale:

CALGreen applies to all occupancies where there is no other state agency that has authority, so this proposed code change will clarify that CALGreen commissioning applies to those occupancies that are not regulated by the OSHPD or the California Energy Code as stated in Section 100.0 Scope. For example, Institutional Group I, nursing homes, foster care facilities, and jails and Laboratory Group L occupancies; as defined in the *California Building Code* are not currently regulated by other state agencies and therefore CALGreen applies. Additionally, CBSC is proposing to repeal Exception 4 and the following "Note" as they are duplicative and are now covered in the scoping requirements of the proposed amended to Section 5.410.2

Benefit:

Maintain clarity for the code user as to the applicability of CALGreen commissioning. This amendment will benefit the code user and the local enforcing agency.

Section 5.410.2.1. Owner's or Owner representative's Project Requirements (OPR) item 2. and **Section 5.410.2.2** Basis of Design (BOD) items 1, 2 and 3.

Specific Purpose:

CBSC is proposing to amend Items 2 in section 5.410.2.1 and items 1, 2 and 3 in section 5.410.2.2 to repeal the reference to the California Energy Code sections 120.8 (b) and 120.8 (c) for commissioning requirements.

Rationale:

The items listed in the Sections above are duplicative and are now covered in the scoping requirements of the proposed amendments to Section 5.410.2 .

Benefit:

Maintain clarity for the code user as to the applicability of CALGreen commissioning. These amendments will benefit the code user and the local enforcing agency.

ITEM 18. CBSC Proposes to amend mandatory regulations in Chapter 5, Division 5.5, Section 5.503 Fireplaces

Section 5.503.1 Fireplaces (Formerly General).

Specific Purpose:

This proposed action is editorial in nature to clarify the application of the title of this section.

Rationale:

The amended language would maintain consistency with other the similar titles in the code.

Benefit:

Maintain clarity for the code user.

Section 5.503.1.1 Woodstoves.

Specific Purpose:

This proposed action is non regulatory and is intended to update the title of the U.S. EPA emission standards.

Rationale:

BSC proposes to continue adoption of the above referenced section with modification. BSC proposes to clarify and update the title of the U.S. EPA emission standards, and to clarify that woodstoves and pellet stoves are required to have a permanent label indicating they are certified to meet the emission limits.

Benefit:

The proposed modification provides clarity to the code user and consistency with the U.S. EPA New Source Performance Standards (NSPS). There is no intended change in regulatory effect. Additionally, this amendment will align with HCD which adds consistency for the code user.

ITEM 19. CBSC Proposes to amend mandatory regulations in Chapter 5, Division 5.5, Section 5.504 Pollutant Control

**Section 5.504.1 (Formerly 5.504.1.3) Temporary ventilation and
Section 5.504.4**

Specific Purpose:

This proposed action is to make editorial corrections the section 5.504.1 and the referenced section number for section 5.504.4.

Rationale:

The amended language would correct the section number so that it does not appear to be a subsection. Additionally, this amendment clarifies the intent for finish materials to comply with all of the subsections of 5.504.4.

Benefit:

Maintain clarity for the code user

ITEM 20. CBSC Proposes to amend voluntary regulations in Appendix A5, Division A5.1, Section A5.101 General

A5.101.1 Scope (Formerly General)

Specific Purpose:

This proposed action is editorial in nature to clarify the application of the title of this section.

Rationale:

The amended language would maintain consistency with other the similar titles in the code.

Benefit:

Maintain clarity for the code user.

ITEM 21. CBSC Proposes to amend non-regulatory notes in Appendix A5, Division A5.1, Section A5.106 Site Development

Section A5.106.2

Section A5.106.5.1.4 Vehicle Designations;

Notes: 1, 1c and 1d

Specific Purpose:

This proposed action is editorial in nature to clarify the term used by DMV for car labeling designation, and to correct the term used by U.S. EPA for fuel economy regulations and standards.

Rationale:

The amended language corrects the reference number to Section A5.106.2 and corrects the term used by DMV for car labeling designation, and to correct the term used by U.S. EPA for fuel economy regulations and standards. Additionally, CBSC is repealing outdated contact information for DMV Registration Operations and ARB Public Information.

Benefit:

Maintain clarity for the code user.

ITEM 22. CBSC Proposes to amend voluntary regulations in Division A5.1, Section A5.106 related to EV Charging

Section A5.106.5.3 Electric Vehicle (EV) Charging.

Specific Purpose:

CBSC proposes to amend the above referenced section by providing general requirements and a reference to the California Building Code, Chapter 11B when EVSE equipment is installed.

Rationale:

This language was amended to align with the new mandatory Section 5.106.5.3.

Benefit:

Adding a cross reference to the accessibility provisions in the California Building Code, Chapter 11B, alerts the code user of other applicable codes when EV charging stations are installed.

Section A5.106.5.3.1 Tier 1.

Specific Purpose:

CBSC proposes to amend the above referenced section by providing specificity to the EVSE charging space requirements and to clarify the applicable revised Tier 1 and Tier 2 tables.

Rationale:

This language was amended to point to the mandatory section for consistency and to reference to the appropriate revised Tier 1 and Tier 2 tables as a result of the amendments made to tables A5.106.5.3.2 and A5.106.5.3.2.

Benefit:

The revised code section gives the code user appropriate reference the applicable Tier 1 and Tier 2 tables.

Section A5.106.5.3.2 Tier 2.

Specific Purpose:

CBSC proposes to amend the above referenced section by providing specificity to the EVSE charging space requirements and to clarify the applicable Tier 1 and Tier 2 tables.

Rationale:

This language was amended to point to the mandatory section for consistency and to reference to the appropriate revised Tier 1 and Tier 2 tables as a result of the amendments made to tables A5.106.5.3.2 and A5.106.5.3.2.

Benefit:

The revised code section gives the code user appropriate reference the applicable Tier 1 and Tier 2 tables.

Table A5.106.5.3.1

Specific Purpose:

CBSC proposes to amend the above Table A5.106.5.3.1 to increase the Tier 1 provision from 4% to 8% in an effort to further advance the potential for EV preparedness.

Rationale:

The Tier 1 provision has been modified to incorporate a sliding scale similar to the mandatory measure. There is no fiscal effect since Tier 1 is a voluntary measure available for adoption by local agencies. However, if all local governments adopted Tier 1 as mandatory, it may add 0.07% to total costs for commercial building new construction.

Additionally, under a mandate from Assembly Bill 1092 (Chapter 410, Statutes of 2013) authored by Assembly Member Levine, CBSC was directed to develop mandatory EV standards for nonresidential development during the 2016 Triennial Code Adoption Cycle. In support of the Governor's Executive Order B-16-2012, CBSC adopted the mandatory EV standards in Section 5.106.5.3 at an earlier date during the 2013/2014 Intervening Code Cycle.

Healthy and Safety Code Section 18930.5(b) as amended by Assembly Bill 341 allows the CBSC and other state agencies that propose building standards to allow for input by state agencies that have expertise in green building subject areas. The California Air Resources Board (CARB) has expertise in air quality, climate change, and EV charging infrastructure. On July 10, 2015, CARB provided in-depth technical and fiscal analysis along with suggested code changes to the EV charging infrastructure building standards included in the CALGreen Code.

In addition to supporting the Administration's directives, CBSC's goal is to enable future charging capability at nonresidential facilities in an effort to reduce the lack of access to EV charging which currently exists. We believe this effort will further encourage the purchase and use of EVs for routine transportation. In addition, this proposal would result in significant cost savings for future installation of EV charging stations at nonresidential occupancies.

This section and table specify the minimum number of required parking spaces to be used to design the electrical infrastructure for future EVSE capability. The proposed revised minimum numbers are based on the ARB technical and fiscal analysis. ARB gathered data from multiple sources to identify how many EV charging spaces will be needed in workplace locations by 2020. ARB gathered information on existing, funded, and proposed EV charging infrastructure to determine the gap in needed Level 2 EV charging stations remaining for 2020. An estimated gap of at least 64,000 and as many as 134,000 EV charging spaces needs to be filled in workplace locations by 2020.

Benefit:

These proposed changes will help to fill the gap of EVSE charge points needed in 2020. It will also help to improve air quality and reduce GHG emissions in California.

Table A5.106.5.3.2

Specific Purpose:

CBSC proposes to increase the Tier 2 provision from 6% to 10%.

Rationale:

The Tier 2 provision has been modified to incorporate a sliding scale similar to the mandatory and Tier 1 measures. There is no fiscal effect since Tier 2 is a voluntary measure available for adoption by local agencies. However, if all local governments adopted Tier 2 as mandatory, it may add 0.1% to total costs for commercial building new construction.

Additionally, under a mandate from Assembly Bill 1092 (Chapter 410, Statutes of 2013) authored by Assembly Member Levine, CBSC was directed to develop mandatory EV standards for nonresidential development during the 2016 Triennial Code Adoption Cycle. In support of the Governor's Executive Order B-16-2012, CBSC adopted the mandatory EV standards in Section 5.106.5.3 at an earlier date during the 2013/2014 Intervening Code Cycle.

Healthy and Safety Code Section 18930.5(b) as amended by Assembly Bill 341 allows the CBSC and other state agencies that propose building standards to allow for input by state agencies that have expertise in green building subject areas. The California Air Resources Board (CARB) has expertise in air quality, climate change, and EV charging infrastructure. On July 10, 2015, CARB provided in-depth technical and fiscal analysis along with suggested code changes to the EV charging infrastructure building standards included in the CALGreen Code.

In addition to supporting the Administration's directives, CBSC's goal is to enable future charging capability at nonresidential facilities in an effort to reduce the lack of access to EV charging which currently exists. We believe this effort will further encourage the purchase and use of EVs for routine transportation. In addition, this proposal would result in significant cost savings for future installation of EV charging stations at nonresidential occupancies.

This section and table specify the minimum number of required parking spaces to be used to design the electrical infrastructure for future EVSE capability. The proposed revised minimum numbers are based on the ARB technical and fiscal analysis. ARB gathered data from multiple sources to identify how many EV charging spaces will be needed in workplace locations by 2020. ARB gathered information on existing, funded, and proposed EV charging infrastructure to determine the gap in needed Level 2 EV charging stations remaining for 2020. An estimated gap of at least 64,000 and as many as 134,000 EV charging spaces needs to be filled in workplace locations by 2020.

Benefit:

These proposed changes will help to fill the gap of EVSE charge points needed in 2020. It will also help to improve air quality and reduce GHG emissions in California.

Section A5.106.5.3.3 Identification

Specific Purpose:

CBSC proposes to amend the above referenced section by amending the verbiage for signage from raceway to wiring.

Rationale:

This language was amended to align with to the wiring requirements in the mandatory section for consistency.

Benefit:

This proposed change will help to code user in applying the identification provision.

ITEM 23. CBSC Proposes to amend voluntary regulations in Division A5.1, Section A5.303 related to Indoor Water Use

A5.303.3 Appliances and fixtures for commercial application

Items:

2b-clothes washers,

4-Food steamers,

5 [BSC-CG],

6 Combination ovens

8-Food waste pulping systems w/ new Note

TABLE A5.303.3: COMMERCIAL DISHWASHER WATER USE

Clothes washers

Specific Purpose:

CBSC propose to amend the above the clothes washer provisions to reference ENERGY STAR.

Rationale:

Commercial Dishwashers (Voluntary)

ENERGY STAR requirements serve as the model standard for the proposed commercial dishwasher voluntary code language. The requirements are based on the ENERGY STAR specification entitled, "Commercial Dishwashers Key Product Criteria Version 2.0" dated February 1, 2013 (ENERGY STAR 2013). Proposed code language for commercial dishwashers would amend the existing voluntary CALGreen standard for commercial dishwashers (BSC 2013). The existing voluntary CALGreen language limits water use for only the following three types of commercial dishwashers: conveyer type with maximum water use of 0.7 gallons per rack, door type with maximum water use of 0.95 gallons per rack, and undercounter-type dishwashers with maximum water use of 0.90 gallons per rack.

Benefit:

The proposed code would decrease the water use for commercial dishwasher to align with the current ENERGY STAR requirements. Further, the proposed code change would include additional product categories and would specify requirements for both high and low temperature applications.

Food Steamers

Specific Purpose:

CBSC propose to amend the above code section for Food Steamers to reduce water consumption.

Rationale:

The proposed code change would update the existing voluntary requirement for commercial food steamers. The existing voluntary CALGreen standard requires that food steamers be connectionless or boilerless. The proposed voluntary code sets water usage requirements by production design of steamer: batch and cook-to-order. While still requiring that food steamers be connectionless or boilerless, the requirement is amended to also mandate that batch type steamers consume no more than 2 gallons of water per pan per hour and cook-to-order steamers no more than 5 gallons of water per pan per hour, including condensate water.

Benefit:

The proposed code would decrease the water use for Commercial Food Steamers.

Commercial Combination Ovens

Specific Purpose:

CBSC propose to amend the above code section for Commercial Combination Ovens to reduce water consumption.

Rationale:

The proposed code language for combination ovens has been modeled to align with IAPMO GPMCS 2015 (IAPMO 2105).

Benefit:

The proposed code would decrease the water use for Commercial Combination Ovens.

Food waste Pulping Systems (Voluntary) with new Note.

Specific Purpose:

CSBC proposes to add a voluntary measure for Food waste Pulping Systems.

Rationale:

The proposed code language was modeled after similar language addressing reducing water consumption of pulpers in LEED Version 4 (United States Green Building Council 2014).

A new Note was added to clarify that potable water excludes on-site grey water use, such as dishwasher discharge water.

Benefit:

The proposed code would decrease the water use for commercial Food waste Pulping Systems.

TABLE A5.303.3: COMMERCIAL DISHWASHER WATER USE

Specific Purpose:

CSBC proposes to amend table A5.303.3 COMMERCIAL DISHWASHER WATER USE.

Rationale:

The proposed code change would update the existing voluntary requirement for commercial dishwashers. The existing voluntary CALGreen standard requires that dishwashers comply with the water usage maximum levels described in Table A5.303.3 of the 2013 standards.

The proposed code changes are not designed to enact substantial changes to CalGreen at this time and would modify the existing requirements so that they align with ENERGY STAR® by:

Adding additional equipment types;
Modifying the high temperature maximum gallon per rack requirements; and
Replacing the chemical maximum gallon per rack requirements with low temperature maximum gallon per rack requirements.

Benefit:

The proposed code would decrease the water use for commercial dishwashers and could result in cost-effective water and energy savings.

ITEM 24. CBSC Proposes to amend voluntary regulations in Division A5.3, Section A5.303 related to Indoor Water Use

Section A5.303.4.1 Nonwater supplied urinals and waterless toilets.

Specific Purpose:

CBSC is proposing to add a new voluntary tier option for Hybrid urinals, nonwater urinals and waterless toilets.

Rationale:

This proposed new code section will be consistent with Chapter A4 Residential voluntary measure in the 2013 CALGreen Code and aligns with HCD'S current proposed amendments.

Benefit:

Adding Hybrid Urinals nonwater urinals and waterless toilets as a voluntary provision into CALGreen will allow the local jurisdictions the ability to adopt the use of hybrid urinals as a voluntary measure. Additionally, the allowance of waterless appliances as an option will aide in reducing the use of potable water for flushing urinals and toilets.

ITEM 25. CBSC Proposes to amend voluntary regulations in Appendix A5, Division A5.4, Section A5.405 Material Sources

Section A5.405.4 Recycled content.

Specific Purpose:

Currently, the above referenced section requires a performance method to use 10% recycled content value for Tier 1 and 20% recycled content value for Tier 2. CBSC proposes to amend Section A5.405.4 by adding a hybrid prescriptive approach to the Tier 1 and Tier 2 language for the use of recycled content materials. Additionally, the language was amended to repeal the [BSC] banner and the title for Tier 1 section for editorial reasons.

Rationale:

The California Department of Resources Recycling and Recovery (CalRecycle) initially proposed this section in CBSC's CALGreen workshop on February 5, 2015. AB 341 (Chapter 476, Statutes of 2011) set California's statewide recycling goal at 75%, and directed CalRecycle to propose statewide strategies to assist in meeting that goal. Increasing demand for recycled content materials provides markets for materials collected as a result of AB 341 programs. Increasing the purchase of recycled content materials such as latex paint and nylon carpet also supports the efforts of the state's carpet (Chapter 681, Statutes of 2010 (Perez, AB 2398)) and paint (Chapter 420, Statutes of 2010 (Huffman, AB 1343)) stewardship programs. Furthermore, the use of recycled content materials in place of virgin materials results in significant greenhouse gas emission reductions, consistent with the Air Resource Board's 2014 Updated Scoping Plan. Stakeholders have indicated that the current method of compliance is often too difficult to implement and achieve. This streamlined method will allow greater flexibility to both builders and enforcing agencies, while continuing to encourage greater demand for recycled content building materials.

Benefit:

By simplifying this section, builders and enforcing agencies will have a clearer methodology of how to achieve compliance, demand for recycled content building materials will increase, and a reduction in greenhouse gas emissions will result.

Section A5.405.4.3 Determination of recycled content value of materials (RCV_M): Notes.

Section A5.405.4.4 Determination of recycled content value of assemblies (RCV_A): Note.

Specific Purpose:

CBSC proposes to amend the notes in the above referenced sections to change how recycled content products that do not have specific labeling will count towards compliance.

Rationale: Changing the way these non-designated recycled content materials count towards compliance will remove the incentive for manufacturers to simply designate pre-consumer materials as recycled content to allow the benefits of being counted as partially containing post-consumer recycled content

material.

Benefit:

AB 341's diversion goal focuses on post-consumer materials, and this change will assist the markets for post-consumer materials collected as part of increased diversion programs.

Table A5.405.4: Minimum Recycled Content Levels.

Specific Purpose:

CBSC proposes to add this table to list the minimum requirements of products that qualify under the hybrid prescriptive approach.

Rationale:

Many of the requirements are drawn from the minimum requirements listed in Public Contract Code section 12209. Others are drawn from national standards, NSF, or from those published by national organizations such as the Collaborative for High Performance Schools. The addition of a prescriptive approach for recycled content materials was discussed during CBSC's CALGreen workshop. Comments were received to suggest adding a list of qualifying materials from multiple sources rather than referencing only one source to comply with this provision.

Benefit:

This table allows code users to easily identify the products that meet the prescriptive requirements for recycled content materials.

ITEM 26. CBSC Proposes to amend mandatory regulations in Chapter 5, Division 5.4, Section 5.408 Construction Waste Reduction, Disposal and Recycling

Section A5.408.3.1 Enhanced construction waste reduction – Tier 1.

Section A5.408.3.1.1 Enhanced construction waste reduction – Tier 2.

Specific Purpose:

CBSC is proposing to amend the voluntary standards for diverted nonhazardous construction and demolition waste for Tier 1 and for Tier 2 by adding an additional requirement to include a third party verification of the waste management plan.

Rationale:

This proposed amendment maintains the existing threshold for waste diversion but requires better documentation. Verification is per the Recycling Certification Institute's Certification of Real Rates (CORR) protocol, or other locally approved verification that meets eligibility guidelines. CBSC initially proposed to increase Tier 1 to 75-percent and Tier 2 to 85-percent. However, comments were received at the CALGreen workshop indicating that those thresholds are currently difficult to achieve. It was also suggested that a better step forward would be to include third party verification. The Department of Housing and Community Development are proposing similar amendments this code cycle for residential occupancies that will align with CBSC.

Benefit:

The proposed amendment would significantly assist the state in meeting the statewide recycling goal of 75-percent by 2020 as established by AB 341 (Chapter 476, Statutes of 2011). The addition of third party verification will ensure that the required thresholds for diversion are met.

ITEM 27. CBSC Proposes to amend voluntary regulations in Appendix A5, Division A5.5, Section A5.504 Pollutant Control

Section A5.504.1.1 Temporary ventilation; Item 2

Specific Purpose:

This proposed action is editorial in nature to correct the name of the Sheet Metal and Air Conditioning Contractors' National Association.

Rationale:

The amended language would clarify the referenced organization to comply with.

Benefit:

Maintain clarity for the code user.

Section A5.504.1.1 Temporary ventilation; Items 3 & 4

Specific Purpose:

This proposed action is editorial in nature to repeal code language that was repealed in prior rulemaking cycles but not removed during publication.

Rationale:

The repeal of the existing code language in item 3 is necessary because BSC repealed this section during the 2010 code adoption cycle (rulemaking file numbers BSC 02/10) and DSA during the 2013 code cycle (rulemaking file DSA 06/12).

The repeal of the existing code language in item 4 is necessary because BSC repealed this section during the 2010 code adoption cycle (rulemaking file numbers BSC 02/10) and DSA during the 2013 code cycle (rulemaking file DSA 06/12).

Both of these code items were repealed in rulemaking but were inadvertently not removed in print.

Benefit:

Maintain clarity for the code user by clarifying and removing repealed code language.

ITEM 28. CBSC Proposes to amend regulations in Appendix A5, Division A5.6, Section A5.601 CALGreen TIER 1 AND TIER 2

Section A5.601.2.4 Voluntary measures for Tier 1.

Section A5.601.3.4 Voluntary measures for Tier 2.

Specific Purpose:

This proposed action is to update the requirements of meeting CALGreen Tier 1 and Tier 2 with the proposed amendments by CBSC for recycled content.

Rationale:

The amendments align the values in the referenced sections with the new proposed amendments by CBSC.

Benefit:

Maintain clarity and consistency for the code user.

ITEM 29. CBSC Proposes to amend Table A5.602 Nonresidential Occupancies Application Checklists Table A5.602

Specific Purpose:

CBSC proposes to amend the above referenced checklist as required based on proposed code changes in the various chapters.

Rationale:

The Nonresidential Occupancies Application Checklist is being updated to reflect changes made in both the mandatory provisions of Chapter 5 and voluntary provisions of Appendix A5. Additionally, there are

editorial updates to the checklist to reflect current supplements and errata items along with coordinating the code language in both the mandatory and voluntary code provisions. The Nonresidential Occupancies Application Checklist is a reference document and may be modified and used as a template by local enforcing agencies. This checklist reflects mandatory and Tier 1 and Tier 2 prerequisites and is not by itself a regulatory document.

Benefit:

Maintain clarity and consistency for the code user.

TECHNICAL, THEORETICAL, AND EMPIRICAL STUDY, REPORT, OR SIMILAR DOCUMENTS:

(Government Code Section 11346.2(b)(3) requires an identification of each technical, theoretical, and empirical study, report, or similar document, if any, upon which the agency relies in proposing the regulation(s).)

1. California Air Resources Board, *First Update to the Climate Change Scoping Plan: Building on the Framework*. May 2014.
<http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf>
2. California Integrated Waste Management Board, *California 2008 Statewide Waste Characterization Study*. August 2009.
<<http://www.calrecycle.ca.gov/Publications/Documents/General/2009023.pdf>>
3. CalRecycle, *Highlights of CalRecycle's 2014 Waste Characterization Study*. May 2015.
<<http://calrecycle.ca.gov/Actions/Documents/85\20152015\1357\May 19 Presentation Waste Char Study NC 1.pdf>>
4. CalRecycle, *Statewide Strategies to Achieve the 75 Percent Goal by 2020*. October 2013.
<<http://www.calrecycle.ca.gov/75Percent/UpdateOct13.pdf>>
5. California Air Resources Board, *Electric Vehicle Charging Infrastructure: Green Building Standards (CALGreen) Code, Code Change Proposal for Nonresidential Buildings Technical and Fiscal Analysis*, June 30, 2015.

STATEMENT OF JUSTIFICATION FOR PRESCRIPTIVE STANDARDS:

(Government Code Section 11346.2(b)(4) requires a statement of the reasons why an agency believes any mandates for specific technologies or equipment or prescriptive standards are required.)

California's building standards codes have historically been a mix of performance and prescriptive provisions and reference standards. This proposed code language continues this practice, such that wherever possible, a performance option is included to provide flexibility to the code user.

CONSIDERATION OF REASONABLE ALTERNATIVES

(Government Code Section 11346.2(b)(5)(A) requires a description of reasonable alternatives to the regulation and the agency's reasons for rejecting those alternatives. In the case of a regulation that would mandate the use of specific technologies or equipment or prescribe specific action or procedures, the imposition of performance standards shall be considered as an alternate. It is not the intent of this paragraph to require the agency to artificially construct alternatives or describe unreasonable alternatives.)

The modifications that CBSC proposes during this triennial code cycle are intended to clarify and correct as necessary the provision of the mandatory and voluntary code being used in California. The amendments are responsive to comments received in the previous and current code adoption cycles and to address concerns raised at various training events held by CBSC across the state. No alternative to this responsive action were considered.

REASONABLE ALTERNATIVES THE AGENCY HAS IDENTIFIED THAT WOULD LESSEN ANY ADVERSE IMPACT ON SMALL BUSINESS.

(Government Code Section 11346.2(b)(5)(B) requires a description of any reasonable alternatives that have been identified or that have otherwise been identified and brought to the attention of the agency that would lessen any adverse impact on small business.)

No alternatives were identified to lessen the adverse impact on small business. Most of the proposed modifications to the code facilitate understanding and compliance by the code user. Those proposals that are new to the code or are made more stringent have been vetted through stakeholder outreach, through both BSC focus group meetings and individual contact. Those proposals have been justified by proposing parties as providing benefits that are greater than costs under the current regulation, as summarized in the *Economic and Fiscal Impact Statement*. Overall, while there may be some one-time costs associated with these regulations, often they can be achieved cost neutral, and will generally benefit the public health and environment through increased landfill diversion and GHG reductions.

FACTS, EVIDENCE, DOCUMENTS, TESTIMONY, OR OTHER EVIDENCE OF NO SIGNIFICANT ADVERSE IMPACT ON BUSINESS.

(Government Code Section 11346.2(b)(6)(A) requires the facts, evidence, documents, testimony, or other evidence on which the agency relies to support an initial determination that the action will not have a significant adverse economic impact on business)

BSC has determined that this regulatory action would have no significant adverse economic impact on California business enterprises and individuals, including the ability of California businesses to compete with businesses in other states, as detailed in the *Economic and Fiscal Impact Statement* and Exhibit A.

ASSESSMENT OF EFFECT OF REGULATIONS UPON JOBS AND BUSINESS EXPANSION, ELIMINATION OR CREATION

(Government Code Sections 11346.3(b)(1) and 11346.5(a)(10))

The California Building Standards Commission has assessed whether or not and to what extent this proposal will affect the following:

☐ The creation or elimination of jobs within the State of California.

BSC has determined that this regulatory action would have no significant adverse economic impact on jobs in California, but may have benefit of new jobs related to increase California-based manufacturing that uses recycled content materials.

☐ The creation of new businesses or the elimination of existing businesses within the State of California.

BSC has determined that this regulatory action would have no significant adverse economic impact on the elimination or creation of California business.

☐ The expansion of businesses currently doing business with the State of California.

BSC has determined that this regulatory action would have no significant adverse impact on businesses. The number of businesses within California is not expected to change, but the number of persons employed is expected to show a small net increase.

☐ The benefits of the regulation to the health and welfare of California residents, worker safety, and the state's environment.

BSC has determined that this regulatory action would have a benefit to the health and welfare of residents and workers as well as on the environment.

ESTIMATED COST OF COMPLIANCE, ESTIMATED POTENTIAL BENEFITS, AND RELATED ASSUMPTIONS USED FOR BUILDING STANDARDS

(Government Code Section 11346.2(b)(6)(B) states if a proposed regulation is a building standard, the initial statement of reasons shall include the estimated cost of compliance, the estimated potential benefits, and the related assumptions used to determine the estimates.)

- No increased cost of compliance for those regulations that make technical, non-substantive or clarifying changes.
- Increased cost of compliance for a few regulations, including adding space for organics recycling for occupants, construction and demolition waste diversion, and recycled content of materials; see *Economic and Fiscal Impact Statement* and **Exhibit A** for a cost analysis. The associated benefit of providing the groundwork for increased waste diversion which will preserve natural resources far outweighs the modest cost impact.
- The cost for installing EV charging infrastructure in 6 percent of new parking lots that have 10 parking spaces or more is an estimated cost increase of about 0.1% compared to total construction costs of nonresidential buildings. Initial construction costs of \$18 million to \$22 million may incur annually between 2017 and 2020 due to adoption of revisions to this mandatory measure. However, retrofits costs of \$84 million to \$186 million would be avoided annually by installing EV charging infrastructure during new construction. An estimated statewide cost savings of \$66 million to \$164 million may be achieved annually by adopting revisions to the EV charging infrastructure provisions. See *Economic and Fiscal Impact Statement* and **Exhibit B** for a cost analysis.
- The cost associated with the proposed regulations water efficiency for commercial food service equipment. See *Economic and Fiscal Impact Statement* and **Exhibit C** for a cost analysis.
- Overall, while there may be some one-time costs associated with these regulations, it is expected that they can be achieved cost neutral, and will generally benefit the public health and environment through increased landfill diversion and green-house gas reductions.
- Protection of public health and safety, worker safety and the environment.
- General welfare of California residents.

DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS

(Government Code Section 11346.2(b)(7) requires a department, board, or commission within the Environmental Protection Agency, the Resources Agency, or the Office of the State Fire Marshal to describe its efforts, in connection with a proposed rulemaking action, to avoid unnecessary duplication or conflicts with federal regulations contained in the Code of Federal Regulations addressing the same issues. These agencies may adopt regulations different from these federal regulations upon a finding of one or more of the following justifications: (A) The differing state regulations are authorized by law and/or (B) The cost of differing state regulations is justified by the benefit to human health, public safety, public welfare, or the environment.)

These regulations do not duplicate nor conflict with federal regulations.